

XXIII. *Further Observations on the Genus Melœ, with Descriptions of Six Exotic Species.* By William Elford Leach, M.D. F.L.S.

Read November 2, 1813.

I TAKE the liberty of laying before the Society descriptions of six exotic species of *Melœ*, together with additional remarks on the British species already described in their Transactions*.

The investigation of a greater number of species has enabled me to ascertain the leading characters of several subdivisions, and to annex the specific characters †.

* Page 35 of this volume.

† From Latreille's invaluable *Genera Insectorum* I have extracted some distinctions (not noticed, or not well defined) which will amend the generic character.

“*Antennæ oculorum margine interno proxime insertæ.*” “*Articulis breviter subobconicis, vel subturbinato-quadratis, rotundatis, et compressis.*”

“*Labrum exsertum, clypeolo affixum, coriaceum.*”

“*Mandibulæ cornæ latere interno inæqualiter multidentato, aut angulato.*”

“*Maxillæ laciniis duabus conniventibus coriaceo-membranaceis, hirsuto-fimbriatis; externa subobtrigona, incurva, intus ad apicem subacuminata; interna subquadrata.*”

“*Elytra abdomine plerumque breviora, extus inflexa, postice late dehiscentia; unius margine interno ad basin*” (sæpius) “*alterius eodem margini superposito.*”

“*Pedes oleum per geniculos emittentes; tibiis posticis calcare*” (externo) “*incrassato apicem*” (sæpius) “*oblique truncato, dilatato.*”—Latreille, *Gen. Crust. et Ins.* ii. p. 216, 217.

SYNOPSIS SPECIERUM*.

A. Antennæ in utroque sexu filiformes, breviores, subcrassiores.

* *Antennæ apice integræ.*

1. *Thorace quadrato.*

1. *M. cicatricosus*. Niger obscurus, capite thoraceque punctatis, elytris scabrosis.
2. *M. variegatus*. Sub-æneus, cupreo viridique variegatus, capite thoraceque punctatis, elytris scabrosis.
3. *M. punctatus*. Niger, capite thoraceque profundè impresso-punctatis, elytris varioloso-punctatis.
4. *M. angulatus*†. Niger, capite thoraceque impresso-punctatis, hoc utrinque angulo antico producto, elytris subrugulosis.
5. *M. uralensis*. Nigro-ater, lævis, capite thoraceque subpunctatis, elytris sublævibus.

2. *Thorace utrinque producto.*

6. *M. excavatus*. Niger, lateribus pallidis, capite triangulato lævi punctato, thorace utrinque excavato, elytris excavato-punctatis.

** *Antennæ apice emarginatæ.*

7. *M. maialis*. Ater, glaber, marginibus segmentorum dorsalium fulvis.

* MELÖES, 1. *lævigata*, Oliv., Fabr. 2. *cyanea*, Fabr. 3. *limbata*, Fabr. 4. *punctata*, Panz. (*Brunsvicensis*, Meyer). 5. *Viennensis*, Schrank. 6. *erythrocnema*, Pallas (Ic. Ins. Ross. II. 76. E. 1. Tab. E. fig. 1.), Meyer. 7. *aprilina*, Meyer, *Insecta mihi incognita*.—MELÖE *marginata*, Fabr., Meyer, (*Galeruca brevipennis*, Illiger, Schonher); forte genus peculiare efformans.

† Antennæ desunt, attamen ad hanc sectionem pertinere videtur.

B. Antennæ in utroque sexu filiformes, longiores, tenuiores.

8. *M. autumnalis*. Niger, capite thoraceque punctatis, elytris punctis erosis confluentibus.

C. Antennæ (maris præsertim ?) extrorsum crassiores.

* *Thorace brevi transverso.*

9. *M. brevicollis*. Niger subviolascens, elytris subrugosis.

** *Thorace elongato.*

10. *M. lævis*. Nigro-ater, lævis, capite thoraceque punctis minutis sparsis, elytris sublævibus.

D. Antennæ (maris præsertim) medio crassiores, sæpius fractæ.

11. *M. Proscarabæus*. Niger, capite thoraceque punctatis, elytris rugosis, lateribus capitis thoracisque pedibus antennisque violascentibus.
12. *M. violaceus*. Violaceus, capite thoraceque punctatis, elytris rugosis.
13. *M. tectus*. Niger, capite thoraceque punctatis, elytris subrugosis elongatis, antennis medio crassissimis.
14. *M. americanus*. Niger, capite thoraceque violascentibus glabris vagè punctatis, elytris nigris subrugulosis.
15. *M. glabratus*. Capite thorace elytrisque glabris subpunctatis.

1. MELÖE CICATRICOSUS.

Melöe cicatricosus. P. 39. TAB. VI. fig. 5. 6.

2. MELÖE VARIEGATUS.

Melöe variegatus. P. 37. TAB. VI. fig. 1. 2.

Melöe majalis. Meyer Tent. Monog. Gen. Mel. p. 17. sp. 3.

Panz. Fn. Ins. Germ. Ind. Ent. par. i. p. 208. 2.

Oliv. Enc. Met. vii. 650. 2.

I am informed by Mr. Hunneman, that this species is highly prized in Germany as a medicine, being considered a specific in hydrophobia. For this purpose it is taken by slipping a hair round its neck, and suspending it until it be dry; by which means the oily secretion they throw out when first taken is preserved, in which its chief virtue is supposed to exist*. Meyer, in his excellent Monograph on this genus, mentions its virtues as a diuretic, and in curing hydrophobia: he describes also what he considers a variety, differing in the structure of the antennæ; but, from what he says, I should be inclined to consider it as an accidental formation, or a distinct species. "Exemplaria (ait) inveniuntur, ubi nonnisi septimo articulo antennarum fractura incipit. Hujus varietatis specimen mecum communicavit Car. Persoon, quod hisce in regionibus (i. e. prope Gottingam) cepit. Ceteris suis proprietatibus autem hæcce varietas a specie non differt." *Meyer Monog.* p. 14.

The food, too, according to Meyer, consists of the leaves of *Veratrum album*, *Viola*, *Anemone*, *Ranunculus*, *Anchusa officinalis* and *Cynoglossum officinale*.

3. MELÖE PUNCTATUS.

M. niger, capite thoraceque profundè impresso-punctatis, elytris varioloso-punctatis.

* Since writing the above I have been favoured with a more particular account by Mr. Hunneman.

"The late King of Prussia (Frederick the Great) purchased the nostrum from the discoverer for a valuable consideration, as a specific against the bite of a mad dog; and in 1781 it was inserted in Sect. ii. p. 25, of the *Disp. Boruss. Brand.* According to this publication, twenty-five of these animals that have been preserved in honey, are with two drachms of powdered black ebony, one drachm of Virginia snake-root, one ditto of lead filings, and twenty grains of fungus Sorbi, to be reduced to a very fine substance; the whole, with two ounces of theriaca of Venice (and if necessary, with a little elder-root) to be formed into an electuary."

Melöe punctatus. P. 44.

Melöe punctata. *Fabr. Ent. Syst.* ii. 518. 4.

Syst. Eleut. ii. 588. 6.

Melöe Tuccia. *Rossi Fn. Etrus. tom. i. p. 238. n. 591. tab. 4. fig. 5?*

Meyer Tent. Monog. Gen. Mel. p. 30?

Habitat in Lusitania, Dom. Sieber.—In Malta, Mus. Dom. MacLeay.—In Italia, Rossi?

Mus. Britannico, Dom. Milne, MacLeay, Leach.

TAB. XVIII. Fig. 1.

DESCR. CAPUT nigrum punctis distinctis profundis impressis. *Antennæ* nigrae, basi præsertim, pilis brevissimis atris obtectæ.

THORAX niger, punctis sæpè confluentibus profundè impressus, posticè emarginatus et medio sub-marginatus, disco glabro impunctato longitudinaliter impresso.

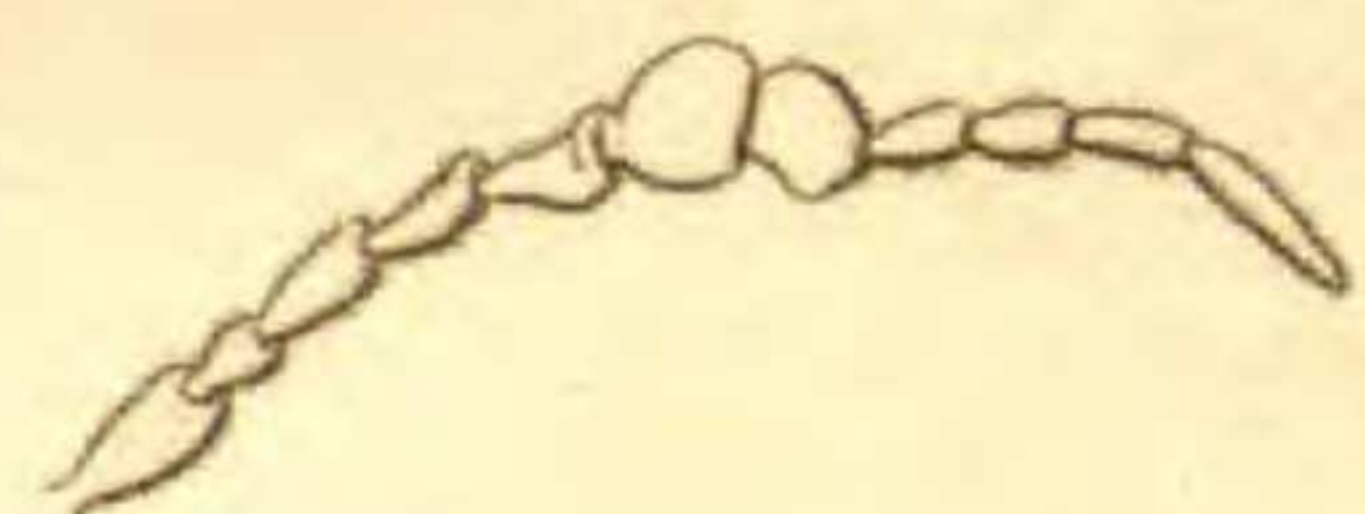
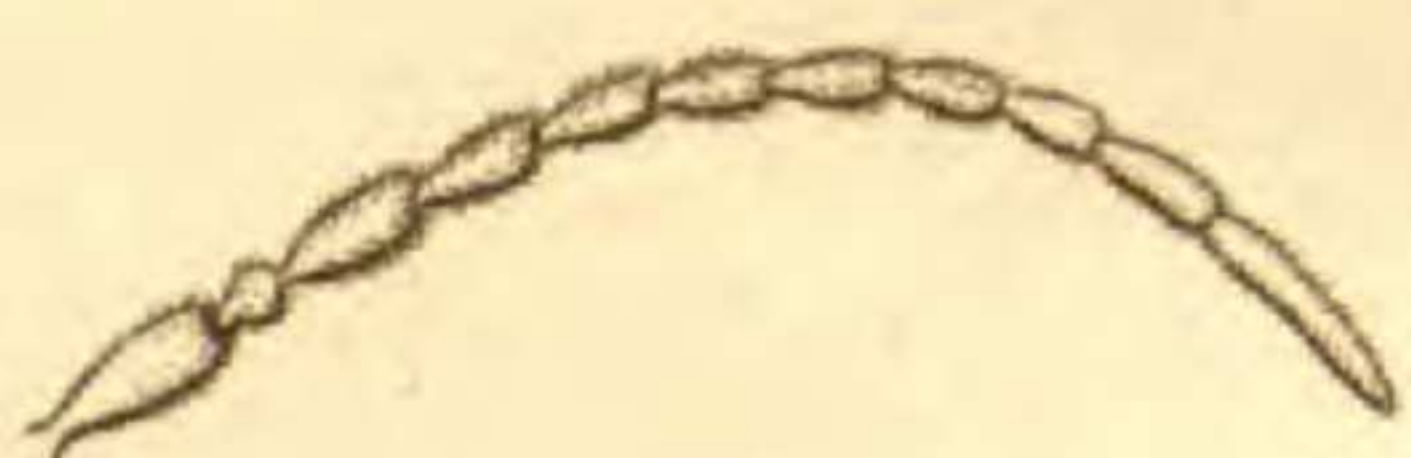
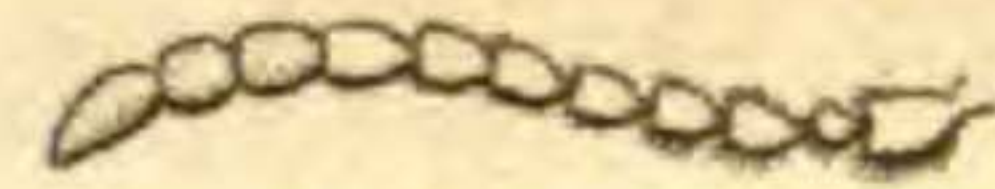
ELYTRA nigra, nitida, varioloso-punctata, apice abruptè rotundata, margine interno sub-crenulato.

ABDOMEN nigro-atrum, obscurum, molle. *Dorsi* articulorum ultimo, et penultimo, cum ventre nigris, nitidis, punctatis.

PEDES nigri, pilis brevissimis conferte obtecti.

The original specimen from which Fabricius described the insect is still preserved in the British Museum. In page 44 of this volume I have most erroneously referred to Panzer for a figure of this insect; but I am now convinced of my mistake, and take this opportunity of apologizing to Panzer for supposing that he could have intended his figure for this species. At the time that paper was written I had no doubt on the subject, as his figure came nearer this insect than any other I was then acquainted with: all the references to Panzer, therefore, must be excluded, and likewise its habitat "in Germaniâ."

I have little doubt that Rossi's *Melöe Tuccia* is intended for this insect, and I find Fabricius entertained a similar opinion: if this idea be correct, the references to Rossi's work, and to that
of



of Meyer, who has merely copied Rossi's description, may remain. Meyer considers it possible that this may be a variety of his *M. Brunsvicensis*, which he considers to be the same with Panzer's *M. punctata*, x. tab. 16.

4. MELÖE ANGULATUS.

M. niger, capite thoraceque impresso-punctatis, hoc utrinque angulo antico producto, elytris subrugulosis.

Habitat ad Caput Bonæ Spei.

Mus. Dom. MacLeay.

DESCR. CAPUT profundè impresso-punctatum nigrum, punctis nonnunquam confluentibus. *Vertex* subimpressa.

THORAX (diametro longitudinali transverso subæquante) niger, punctato-impressus punctis sæpiùs (in disco præsertim) confluentibus, anticè latior, utrinque angulatim-productus, medio longitudinaliter impressus.

ELYTRA undulatim striata, nigra.

ABDOMEN sub-atro-nigrum, molle, singulo segmento maculâ semicirculari rugulosâ. *Venter* sub-coriaceum, rugulosum.

PEDES nigri, pilis sub-nigro-atris brevissimis obtecti. *Ungues* omnes ferrugineo-picei.

The only specimen of this insect I have had an opportunity of examining, occurred in the extensive and valuable collection of my friend Mr. MacLeay, who in this, as on every other occasion, has most liberally permitted me to take away and retain as long as might be necessary any of his insects. The antennæ are mutilated, but from its general habit I have little doubt of its situation in the present section being correct.

5. MEÖE URALENSIS.

M. nigro-ater, lævis, capite thoraceque sub-punctatis, elytris sub-lævibus.

Melöe Uralensis. *Pall. Icon. Ins. Ross.* ii. p. 76. n. 2. tab. E. f. 2. *Iter.* ii. 722. 56.

Melöe punctata. Meyer Tent. Monog. Gen. *Melöes*, 28. sp. 9.
 Habitat in collibus circa Upham inque Uralensium et Altäicarum
 Alpium apricis, teste Pallas.
 Mus. Soc. Linn.

TAB. XVIII. Fig. 2.

DESCR. CAPUT punctis minutis adpersum, fronte lineâ longitudinali sub-impressâ.
Antennæ et palpi obscurè sub-ferrugineo-picei.

THORAX transversus punctis minutis adpersus, anticè sub-undulatus, posticè latè
 emarginatus, et marginatus, lateribus utrinque faveolâ excavatâ, medio longitu-
 dinaliter impressus.

PEDES nigri, pilis brevissimis atris obtecti. *Tarsi* sub-picei. *Ungues* ferruginei.
 β *Pedibus* rufescentibus.

Pallas, to whom we are indebted for the discovery of this species, has given a most excellent figure in the work above quoted. Fabricius quotes this as his *M. punctata*; and Meyer, from this false reference, confounds *M. punctata* of Fabricius and this together. But as he has copied the description given by Pallas, this must be considered as his *punctata*, with which he has likewise placed *M. Viennensis* of Schrank, (*Beytræg. ii. Naturg.* p. 71. 20.) which has the following specific character, "*M. apterus lævis, ater, unicolor*;" but from the figure I should conclude it to be distinct.

6. MELÖE EXCAVATUS.

M. niger, lateribus pallidis, capite triangulato lævi punctato,
 thorace utrinque excavato, elytris excavato-punctatis.

Habitat ——— ?

Mus. Dom. Francillon.

TAB. XVIII. Fig. 3.

DESCR. CAPUT triangulatum, punctatum, anticè compressum, lateribus posticè productis.
Antennæ minimè hirtæ.

THORAX utrinque anticè angulatim-productus, foveâque utrinque excavatus, posticè
 marginatus, sub-emarginatus.

ELYTRA nitida, nigra, punctis obscuris, nigris, excavatis.

ABDOMEN

ABDOMEN pallidum, molle, *Dorso Ventreque* sub-scabrosis, nigris, coriaceis.

PEDES glabri, nigri. *Ungues* interni tenues, nigricantes; externi nigri apice ferrugineo.

This very curious species, of which I have seen but one specimen, is marked "from Germany;" but as I can find no description of it, I am inclined to suspect this to be an erroneous habitat.

7. MELÖE MAIALIS.

Melöe maialis. P. 38. TAB. VI. *fig.* 3, 4.

8. MELÖE AUTUMNALIS.

Melöe autumnalis. P. 40. TAB. VI. *fig.* 7, 8.

This species, Mr. Milne observes, is not found in plenty every year; indeed in the last autumn not one occurred.

9. MELÖE BREVICOLLIS.

Melöe brevicollis. P. 41. TAB. VI. *fig.* 9.

Meyer Tent. Monog. Gen. Melöes, p. 23. *sp.* 6.

Panz. Fn. Ins. Germ. Ind. Ent. i. 208. 4.

β *Pedibus* rufis violascentibus.

10. MELÖE LÆVIS.

M. nigro-ater, lævis, capite thoraceque punctis minutis sparsis, elytris sub-lævibus.

Habitat in Insulâ Americæ St. Domingo.

Mus. Nostr. ex Mus. Davies.

TAB. XVIII. *Fig.* 4.

DESCR. CAPUT nigro-atrum, glabrum, punctis minutis sparsum. *Antennæ* nigrae, sub-pilosæ, nitidæ, articulis tribus ultimis nudis, obscuris.

THORAX nigro-ater punctis minutis nigris, posticè marginatus, lineâ a disco ad marginem posticam ductâ.

ELYTRA lævia, oculo optimè armato reticulato-strigata.

ABDOMEN atro-nigrum, *Dorso* molli macula coriacea rugulosa in singulo segmento, *Ventre* ruguloso.

PEDES nigri, nitidi, pilis atris obtecti, *Ungues* externi picei, interni crocei.

Two imperfect specimens of this singular insect occurred in General Davies's collection; and at his death fell into the hands of a dealer, from whom I purchased them.

11. MELÖE PROSCARABÆUS.

Melöe Proscarabæus. P. 46. TAB. VII. fig. 6, 7.

Oliv. Enc. Method. vii. p. 650. 1.

Melöe atrata. *Meyer Tent. Monog. Gen. Melöes*, p. 15. sp. 2.?

Var. γ . Corpore toto cærulescente, antennis pedibusque violascentibus.

Habitat in Malta.

Mus. Dom. MacLeay.

12. MELÖE VIOLACEUS.

Melöe violaceus. P. 45. TAB. VII. fig. 3, 4, 5.

Melöe Proscarabæus. *Meyer Tent. Monog. Gen. Melöes*, p. 11. sp. 1.?

Var. ζ . Intensè violaceus, elytris majis rugosis.

Habitat in Braziliis.

Mus. Dom. MacLeay.

13. MELÖE TECTUS.

Melöe tectus. P. 47. TAB. VII. fig. 8, 9.

Melöe tecta. *Meyer Tent. Monog. Gen. Melöes*, p. 19. sp. 4.

Melöe punctata. Var. β . *Panz. Fn. Ins. Germ. Ind. Ent.* i. 208. 3.

Var. γ . Sub-testaceus totus, capite coxis femoribus tibiis pleuris que violascentibus.

Mus. Dom. MacLeay.

14. MELÖE AMERICANUS.

M. niger, capite thoraceque violascentibus glabris vagè punctatis, elytris nigris sub-rugulosis.

Habitat in Georgiâ.

Mus. Dom. Francillon δ et φ .—MacLeay φ .